Determination of Public Land (Rangeland) Health for 64071 GEORGE PRICE

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on the assessments, it is my determination that the public land within the George Price allotment #64071 meets the Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ T. R. KREAGER	08/04/2004
Assistant Field Manager	Date

Standards of Public Land Health
Evaluation of 64071 GEORGE PRICE Allotment
[06/30/2004]

The Roswell Field Office conducted rangeland health assessments at one study site within the George Price Allotment #64071. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64071-IDSU-A163	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for the public land on the George Price allotment #64071. Ten (10) of these assessed soil site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on one location were utilized to assess the rangeland health of the public land within the allotment. This allotment is in the "C" (custodial) category due to the small amount of public land present.

The recent dry conditions have had an impact on this allotment and the surrounding area. The early spring precipitation events in 2004 have resulted in favorable conditions on this site. This ecological site classifies as an SD-3 shallow with some loamy inclusions. swales and draw bottoms. The soil phase is a Lozier-Tencee complex occuring in the west-central part of the survey area on low, limestone and indurated caliche hills on 0-9 percent slopes. Also included is Atoka, Upton, Reakor and Pecos soil. Some rocky outcrops exist upslope from the site. The 80 acres/36 hectares of public land is adjacent to the west allotment boundary fence and is situated at the 1/4 corner of sections 13 & 14.

A majority of indicators rated in the None to Slight to Slight to Moderate category. Rock cover and bareground were both estimated at 30 percent each. Bareground falls within the expected range and the rock cover is consistent with the ESD. There are some gullies present but these are naturally occuring and not very active. This indicator rates Slight to Moderate. Litter movement rates as Moderate as this hydrologic attribute shows signs of water flow causing litter displacement and deposition against obstructions and in depressional areas. The plants present include burrograss (Scleropogon brevifolius), tobosa (Pleuraphis mutica), cholla (Opuntia spinosa), croton (Croton spp.) and tridens (Tridens spp.). There is an obvious absence of gramas (Bouteloua spp.) and dropseed

(Sporobolus spp.). The structural/functional groups indicator therefore rates at Moderate with a moderate reduction in species. The litter amount indicator rates at None to Slight as the amount present at 40% far exceeds the ESD of 5-8 percent. Annual production rates at Moderate with an approximate estimate of 350 lbs/ac or kg/ha. The swale bottom, where water has settled is where most of the production exists with tobosa and burrograss on the upland. A fair amount of physical crusting adequate for site protection can possibly weather the upcoming dry arid conditions. A herd of pronghorn (Antilocapra americana) was observed at the time of the field assessment, traversing the hilltops. The cover and vegetation also lends itself to muledeer (Odocoileus hemionus) habitat.

Hydrology - Pasture IDSU - The litter amount rated in the moderate category. The decrease in litter amount suggests that the dry conditions have had a negative affect on the plant growth which decreases the amount of litter that is produced. All other indicators rated as none to slight or slight to moderate. Sand and gravel deposits of Quaternary alluvial deposits and limestone of the San Andres Formation outcrop in the area.

Wildlife/Biotic - Evaluation of the intergrity of the biotic community considered several indicators as attribute indices for the area of interest. Biotic factors are interrelated with several other indicators, including soil/site stability, hydrologic function, and vegetation. Several indicators are singularly biotic and address the vegetation aspect of the ecological site, such as Functional/Structural Groups and Plant Mortality and Decadence, as described above. In addition to the standard worksheet biotic factors, four specific wildlife indicators are included in the biotic evaluation.

Specifically, there were two biotic indicators that rated in the moderate category for this allotment. Annual production and Functional/Strucutral Groups. This is a result of long-term drought within the area and is below what is expected. These indicators will rebound over time with normal climatic conditionsand proper grazing management in accordance with production levels.

It is the professional opinion of the Assessment Team that the public land within the George Price allotment #64071, meets the Upland and Biotic standards. There are no Riparian issues present, therefore this standard was not addressed. See site notes and recommendations for further information regarding this assessment.

Recommendations:

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64071-IDSU-A163			
Legal Land Desc	SWNW 13 0140S 0220E Meridian 23	Acreage	80
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	Y
Watershed	13060009040 FELIX		
Observers	NAVARRO/MCGEE	Observation Date	06/30/2004
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Lt	Soil Taxon Name	LOZIER
Texture Class	NM666 GRV-L	Soil Phase	LOZIER-TENCEE
Texture Modifier	NM666 COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	8.1	NOAA Growing Season Precipitation	5.98
NOAA Avg Annual Precipitation	12.15	NOAA Avg Growing Season Precipitation	9.95
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	

Comments:	Now estimated at 30%. Other 30% is rock and gravel cover.					
S H	Gullies				X	
Comments:	Naturally occuring.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement			X		
Comments:	Litter is displaced and up against obstructions due to water flow.					
S H B	Soil Surface Resistance to Erosion					X
Comments:	Virtually no erosion exists using the soil site stability test.					
S H B	Soil Surface Loss or Degradation				X	
Comments:	Some horizon lost because of the rock exposed.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:	Only minor effect.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Most of the species are on site with a few exceptions. The grama grasses are missing though.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	More litter exists than the ESD calls for.					
B	Annual Production			X		

Comments:	The current estimate is approximately 3/4 of the potential.					
B	Invasive Plants				X	
Comments:	Cholla, acacia and snakeweed can be observed but less than scattered.					
B	Reproductive Capability of Perennial Plants					X
Comments:	Seed head and tiller formation is ok.					
S	Physical/Chemical/Biological Crusts				X	
Comments:	Largely intact with very liittle breaks in continuity.					
B	Wildlife Habitat				X	
Comments:	Pronghorn and muledeer habitat.					
B	Wildlife Populations				X	
Comments:	Pronghorn observed.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	6	4
H	Hydrologic	0	0	1	6	4
B	Biotic	0	0	2	4	7

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

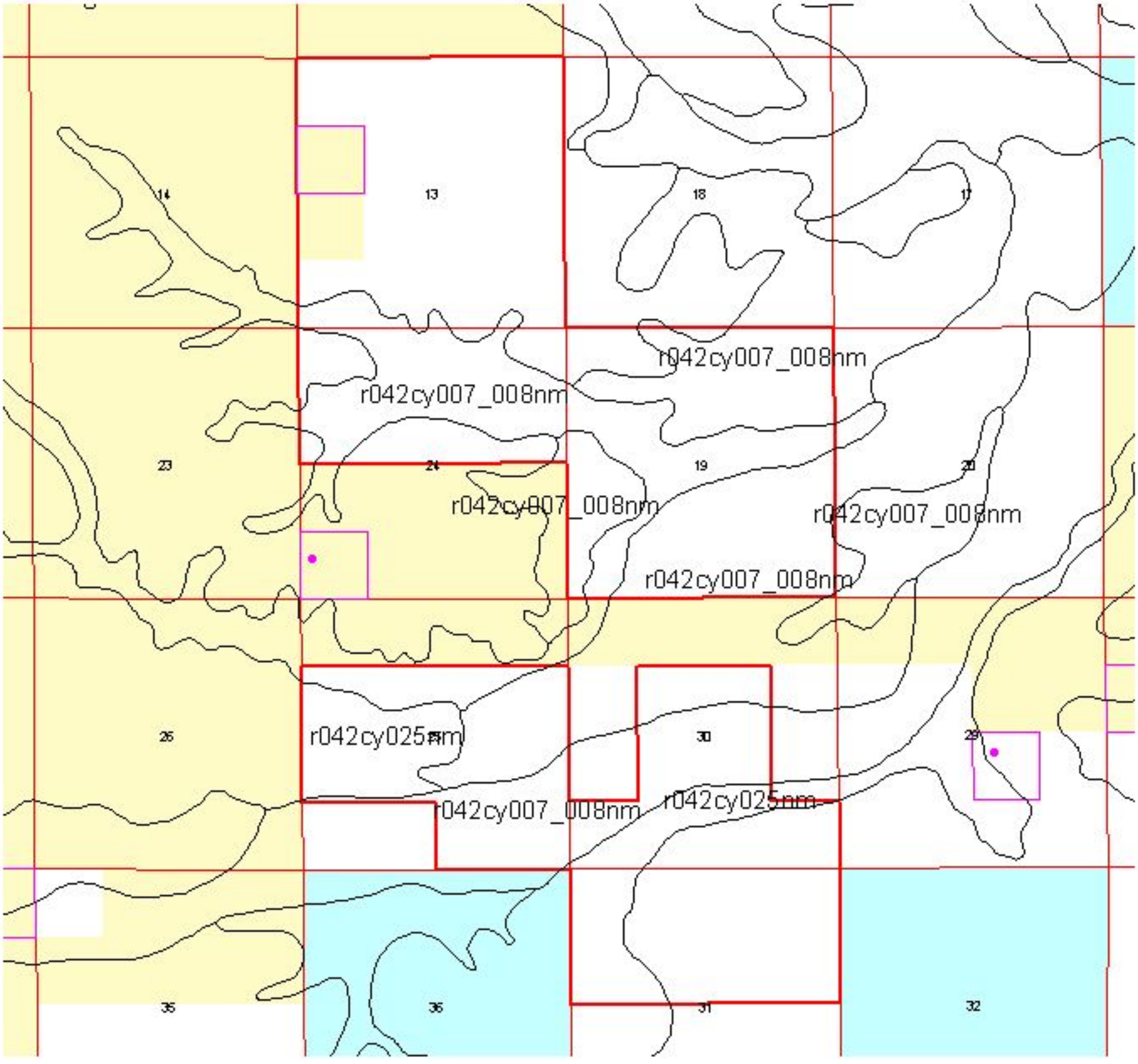
Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	1	10
Biotic		0	2	11

Site Notes: This non-permanent location was located and gps'd. A small herd of pronghorn was observed traversing the hillsides. Swales exists as part of the site with tobosa, burrograss, croton and thistle growing. The 1/4 corner of section 13 and 14 is the middle of the public land parcel on this allotment along the fenceline.

Rangeland Health Assessment
Ecological Sites

Allotment 64071

T14.R22E



T13S.R24E

0.5 0 0.5 Miles

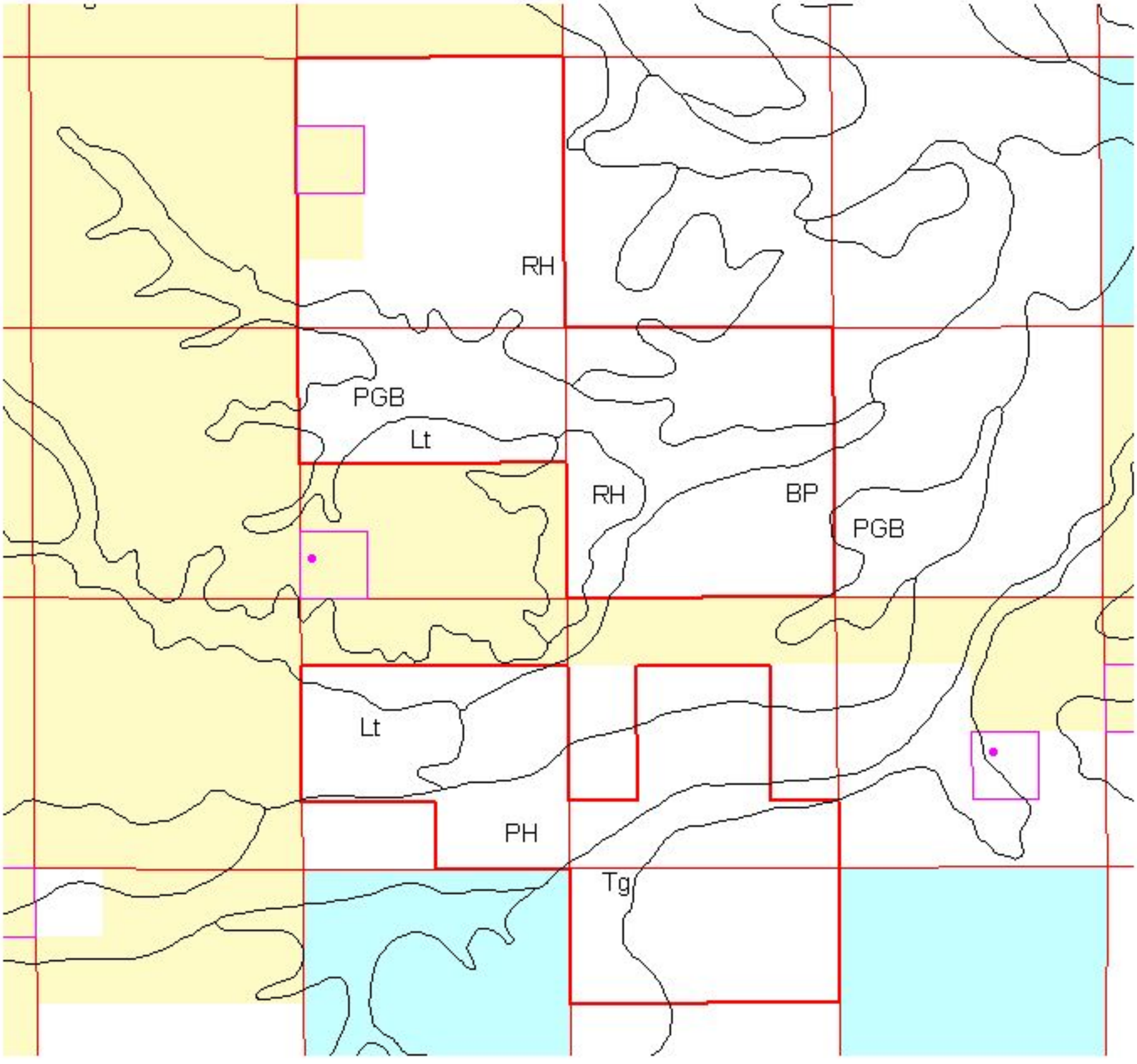
Public
Study Plots
State
Private
Study Locations
Ecological Sites
Allotment Boundary

Produced by the Roswell Field Office
GIS Intern on July 24, 2003.

Rangeland Health Assessment
Soil Mapping Units

Allotment 64071

T14.R22E



T13S.R24E

0.5 0 0.5 Miles

Public
Study Plots
State
Private
Study Locations
Pasture Boundary
Soil Mapping Units
Allotment Boundary

Produced by the Roswell Field Office
GIS Intern on July 24, 2003.